

**BUDGET AND  
CREDITWORTHINESS  
ANALYSIS MODEL  
FOR HUNGARIAN LOCAL  
GOVERNMENTS**

**A HANDBOOK**

Prepared for



Prepared by

Ádám Balogh  
Róbert Kovács



**THE URBAN INSTITUTE**

2100 M Street, NW  
Washington, DC 20037  
(202) 833-7200  
[www.urban.org](http://www.urban.org)

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# **BUDGET AND CREDITWORTHINESS ANALYSIS MODEL FOR HUNGARIAN LOCAL GOVERNMENTS**

## **A HANDBOOK**

### **INTRODUCTION**

The local government Budget and Creditworthiness Analysis Model is able to assess the expected financial position of local governments on the basis of their budgetary data. The model helps to decide whether it is rational for the local government to draw credit, and also determines how much credit the local government can draw. In addition assessing the financial position of the settlement and by presenting future prospects the model makes it easier to take decisions on the future of the settlement.

The local government financial model utilizes the experiences gained with similar models developed in the Czech Republic and Poland by the Urban Institute under USAID programs and the knowledge accumulated during the past few years through the Hungary USAID municipal budgeting program by Metropolitan Research Institute and the Urban Institute. Special appreciation is due to Katharine Mark and Wendy Graham, who prompted and oversaw the development of the model, to Charles Jokay, who managed its production and dissemination, and to József Hegedüs who directs municipal projects at the Metropolitan Research Institute.

As for its structure, the model is composed of five basic units:

One is for the input of data from the current budgetary report and of those of the last five years.

Two is for preparation of the budgetary forecast.

Three is for preparation of scenarios for the future.

Four is for risk analysis.

Five is for calculation of creditworthiness.

These are supplemented by four figures describing the key budgetary indicators on the basis of the three scenarios.

This short brochure is primarily to assist with the use of the model. It does not intend to discuss theoretical issues, although it describes the factors, to the extent necessary, which may be absolutely necessary for the interpretation of the results obtained. This paper follows the sequence of the model's structure and the sequence that should be followed when the model is used.

The file on the floppy can be copied into the computer with the help of the Windows Operator, into the library (map) from which we want to work. After that we search the file in the selected place with the help of the Windows Operator, click on it twice it will condense itself in the "**c:\model**" library. Two files will be established, one Excel [m-v025e.xls] file and one data importing file [data(xl).imp]. The first one contains the model.

To enable people, who are not familiar with the Excel program to perform budgetary analyses, the model can be controlled from the "*Model*" menu. The financial model was prepared so that the tables on the result and the figures can be printed from the "Model" menu by simply pressing one button.

Let us now describe the operation of the model in greater detail.

## DATA

### ***The Data Requirements of the Model***

The *performance data of the budgets* of the local governments should be input into the model. It is on that basis that proper estimates can be made. The data should be entered in current prices, as that is the way they are available in the local government documents. Budgetary data should be stated in thousand HUF, or else the titles would not reflect reality. Those who developed the model were aware of the fact that such a solution is generally not available in the case of "current year" and so when completing the lines on "current year" the best possible datum available should be entered. *For the proper use of the model you have to upload all six years.* The data uploading tables can be consulted in Tables 1 and 2 of the manual.

In the case of the background data also it is recommended to upload the most reliable actual data (e.g., from The Central Statistical Office) into the model. Whenever estimation needs to be made, the model will do it for the user. In the case of budgetary forecasts the local governments often have to meet certain governmental rules. In such cases it is suggested to upload these data also into the model so that the estimation does not differ from the required basic values. It may also be useful to make separate estimation in another file, one that would not take into consideration such requirements.

Care should be taken especially when data on the resources of investments and on the relevant expenditures are uploaded, that is when there are certain deviations from the general rules of budgeting. It is not always certain that data on planned investments should also be uploaded into the model before final decisions are taken. In the case of credits it is recommended to state in the model the exact data on the maturity of existing debts for the coming years.

## **Data Input**

Data uploading is important primarily with respect to budgets of the past five years, but it also affects the forecast and background data. The logic of the latter differs significantly from the technique employed in the other two parts. This will be discussed in the chapter “Background Data” below. Budgetary data on the past and present can be queried only with the help of some data uploading procedure in the model while in the case of budgetary data related to the future data uploading is only a supplementary procedure to the data estimation. In these two cases, in the case of data on the past (and present) and on the future the methods of data uploading are identical; the difference is only in their places on the menu.

There are two ways to enter budgetary data into the model, either directly when running the model, or with the help of a separate data-uploading file. The data uploading tables on pages 1 and 2 contain the budgetary lines, which are to be completed in every case.

## **Data Import**

Data import takes place by entering the data of data(xl).imp file. This method serves the purpose of uploading large volume of data stored on the computer. The import file can be opened in Excel and can easily be completed with Windows options (copying between files, inserting) This file does not permit to complete summary lines, and that actually helps to correct certain basic mistakes. Data are imported annually, because only data on individual years can be imported without overwriting the entire data line, and the possible errors would thus not damage the entire file.

**The uploading of the import file.** In Excel the data(xl).imp file can be opened the following way: after selecting file “megnyitás” (file opening) we set file “típus”(type of file) to \*.\*. Then it becomes visible. We open it the usual way and upload the data, either by entering the data manually or copy them from another file. It is suggested to save the file under another name, saving it with the “imp” extension, as in such a case we will have an empty importing file also left.

**Importing the data into the model.** Data are imported annually. In the “Model” menu we jump to “Adatfelvitel” (data entry) and select here the “data import”(data import). The window of file opening is seen. The usual ways we select the data import file with “imp” extension saved and open it. Now another window is opened. We select the year the data, which we want to import the press the “continue” button. The model now poses two further security questions:

Should it only copy completed cells or also the empty ones?

Should it only copy numerical values?

After the two questions are answered the data import is completed. That is shown also by a result-statistic. If you want to import data on further years also you have to repeat the above operation. If you want to end data import, select “kilépés” exit.

In the case of data on the future data import is available in the section of “import of estimated data” of menu point “forecast”. The file in which are to be entered and from which data can be imported can be the same as the file with data on the past and the present.

### Manual Data Uploading

Data uploading tables in Tables 1 and 2 of this manual differ from the data uploading tables built in the model. These latter ones are divided the way needed by the program, but they carry all the data, which will be needed for data uploading, and the serial numbers are also identical, so they are easier to be identified. These tables can help to prepare for data uploading.

Budgetary data can be uploaded into the model after selecting point “**Data input**” of the “Model”. Within “Data input” we should first decide whether we want to enter **revenue** or **expenditure** data. Menu point “Revenues” is composed of four smaller tables: “**Centrally Regulated operating sources**”, “**Own current revenues**”, “**Capital and investment funds**”, and “**Loans, transfers from previous year, other specific revenues**”. The last revenue point “**Revenues summarized**” helps control. In this table the data cannot be modified, only the figures entered are shown. “Expenditures” can be uploaded into the model in three tables: “**Expenditure categories 1 to 4**”, “**Expenditure categories 5 to 9**”, and “**Classification of operating expenditure in expense types.**” Here also we have a menu point “**Expenditures summarized**” (third line) serving control.

After the selection of the revenue or expenditure table we have to set the **year** data on which we want to enter. That is to be done by pressing the arrow next to the year, and selecting one of the options offered. The model operates with data on six years, that is “Present year” and the preceding five years. For making estimation we believed data on minimum six years are needed, while the data on “current year” are often planned data or modified budget year data which may distort estimation.

After the selection of what will be considered the current year, actual data entry tables are presented. These are to be completed or the data in the white cells are to be re-written. If the table is divided into two parts, paging is possible with the help of the arrows. By pressing the button “Finish” can the data be finally entered into the model; with the help

of “Cancel” we can depart from the table without changing the data. There is also a “Check” button on every page checking certain inconsistencies of the data entered.

If we want to enter manually estimated data that can be done in the “Forecast data” part under sub-points “Manual estimation of revenues or Manual estimation of expenditures”. The procedure itself is identical to the one described above.

### **Background Data**

The first point of the “Model” is “**Background**” Under this point two important dates are to be defined, the six background points are to be entered and their estimation procedure should be determined.

The first information to state in the model is the name of the investigated settlement. That is contained in the first sub-menu line of the “Model”: “**Name of settlement**”. It is worth entering the name of the settlement, as this is the precondition to find the name on the printed documents.

For the use of the model the most important thing is to determine the “**Present year**” In the model the past is represented by the five years preceding the present year and the future is represented by ten years following the present year.

Present year should be determined by selecting “Background” in the “Model “ menu. The second line on the sub-menu then seen is “Present year”. Clicking on it we see the small window named “Choose year”. There is a year stated under the title “Present year”. If that is not the year we want to select we press the small arrow and get a list, and it is from that list that the correct one is to be selected. If we do not want to modify anything, press button “Cancel “ or else the “Finish” button will enter the new data into the model.

The model calculates the per capita income and expenditure of the budget for the present year and the preceding five-year data. That helps to make comparison with other settlements and calculates the tables into comparable price, and such tables will be the basis of forecast, in addition to present the procedures of past years. Financial forecast shall be prepared for ten years following current year. Under “Background” we have to determine the other most important time, the “**Base year of PV calculation**” The model shall use that year for the calculation of the tables, which will carry comparable prices.

Base year shall be determined by selecting the “Background“ point of the “Model” menu. The third line of the sub-menu then shown is the “Base year for real value calculation. Clicking on it the small window “Chose year” is seen. If that is not the year we want to select we press the small arrow and get a list, and it is from that list that the correct

one is to be selected. It cannot be a future date. If we do not want to modify anything, press button “Cancel” or else the “Finish” button will enter the new data into the model. Thus the procedure is identical with the one used for selecting “Present year”.

For its calculations the model uses six further points of background information: **Rate of Inflation**, Change of **GDP**, Debt stock, Assets of municipality, Population and number of Municipal employees. For the purposes of the model Rate of inflation and change of GDP are more important than the rest of the data, as the model uses these data for the calculation of real value as well as for preparing forecasts. The entry of the size of the population permits the calculation of per capita data, and with the help of the other auxiliary data they form part of the risk calculation indicators.

For the determination of inflation we use the route: “Model” \_ “Background” \_ “**Rate of Inflation**” The window “Rate of Inflation” is seen after the above menu points were pressed offers the option of selection from among four tasks:

- “Rate of Inflation - factual data”
- “Rate of Inflation - manual data”
- “Linear estimation of rate of inflation”
- “Rate of inflation - summarized”

The first two points make it possible for the user to enter the expected inflation rate into the model and/or estimate the future interest rate with the help of a simple formula. The data entered will be fixed after the button “Go on” is pressed. By pressing the “Exit” button we leave the given menu point without having entered the data into the menu point.

**Factual Data.** Entering the inflation data of “Present year” and of the earlier years. The correction of entered data.

**Manual Estimation.** Entering known or fixed future inflation values. If using this model enters data the model will consider these figures even if the linear formula is also completed.

**Linear Estimation.** To make more exact estimation the model can determine future inflation values for two periods. Here we have to state the starting and last year of estimation (the arrow next to the year should be pressed and the selection should be made from the list presented), and the value which shows the change in inflation within the given period. For the period after the first estimation period the annual rate can be determined and the limit value after the reaching of which inflation will not longer change but will remain on the same level.

**Rate of Inflation Summarized.** It permits to survey entered and estimated data and change them, if necessary before continuing the work.



The same method, the same procedure is used to enter **GDP**, the **Debt stock** of the local government and the value of its **assets**.

Having selected the GDP, inflation or the debt stock we get to a small menu with four points: entry of actual data, manual estimation, linear estimation and summary of the data. The database is loaded with the inflation and GDP data up to 1998. If 1998 is current year, actual data do not have to be entered, unless we want to change them of the forecast is to be modified with more up-to-date data. Manual estimation is suggested to be used for the years in relation to which we know the expected value of the given background date. In the case of linear estimation a simple method is to be used to determine the two changing phases. (See above in the enhanced text.)

The entry of the **Population** and of the **Municipal Employees** is much simpler; in case we have no information on future data the model employs automatic trend estimation in which no parameter is to be set. We did not consider it important to make finer estimation of these data.

### **Forecast**

It is suggested to perform the forecasting procedure after the data are entered. The selection should be made in the “**Forecast data**” menu point of the “Model”. During the development of the model we tried to apply simple estimation models which would meet the requirements of a rather wide range of users. Forecasts can be performed on two levels: on the individual lines of the budget table or for the entire budget by using a uniform method. The two can also be combined, for the lines for which no separate procedure was set, the model automatically uses the general procedure. No matter on which level the estimation takes place we made it possible to employ three techniques:

- Trend-analysis
- Estimation based on inflation
- Estimation based on GDP

The user may decide not to make forecasts for a given line (“**no forecast**” - that can only be selected from among the general estimation techniques), or he/she can estimate the individual lines himself/herself (**manual estimation of revenues, expenditures** - these cannot be selected from among general techniques). In the case of trend analysis, which on the basis of data on earlier years composes a linear formula, we considered it important to make it possible to leave “current year” out of the calculations (“**trend (last year not inc.)**”). This may be necessary, because in many cases these are not the final data on a closed year, so they may greatly distort estimation.

Forecasting techniques are displayed after the selection of menu point **“Forecast data.”** In the **“Default forecasting procedure”** we select the technique, which is employed by the model for the lines for which we did not select any special method. Under the title “method” we press the small arrow and select the procedure:

**“No forecast”**: we cannot employ general technique, estimation is made only for the lines on which we took individual decision.

**“Trend (last year inc.)”**: Is the application of the simple linear formula, with “current year” included.

**“Trend (last year not inc.)”**: Is the application of the simple linear formula, with “current year” not included.

Estimation **“based of inflation”** actually monitors the changes of inflation. In this case we have to determine a **“multiplier”**, determining the rate of inflation (to be manually entered) and the **“base year”**, on the data of which the estimation will be made (to be selected from the list shown after the arrow next to the number is pressed).

In the case of estimation on **“ based on GDP”** also the **multiplier”** and the **“base year”** for inflation must be set.

After determining the “Default forecasting techniques” we can select the **“manual estimation of revenues”** and the **“manual estimation of expenditures”** In this case the revenue table already known can be uploaded with data in four portions. After selecting the required portion of the table we should determine the data on which year to enter, and then enter the required values. Just as in the case of data on past years, here again we have to page within some sub-tables, or if we enter all the data we can check their consistency.

If we do not have concrete values available yet and want to perform the estimation in relation so some expenditure or revenue items, we need to use lines **“revenue forecast”** and **“Forecast of revenues.”** In this case again first the specific part of the budget table should be selected, then with every individual line we have to select the required one from among the techniques described when discussing general estimation techniques. There are by two points more here: first here again we should select, if the general procedure should apply for the estimation (**“Default forecast method”**) or if we do not want to make any estimation for the given item (**“no forecast”**). Let us take care to correctly set the “ multiplier” and the “base year” for inflation and GDP related estimations.

When programming the forecast it is suggested to select first the default technique, then determine the special estimation procedures for the lines for which we want to use them. It is suggested to check the manual estimation, for should an incorrect value be stated on some line, that would be considered by the model. It is also practical to check

whether the per line estimations are set the way we want, as they can lead to mistakes resulting later in false result. In the case of estimations related to inflation and GDP it is recommended to select the closest closed year.

The *scenarios* also form a part of forecasting. Their purpose is to make it possible to measure possible changes taking place compared to the forecast, and, finally, to make us better prepared for the expected future by taking into consideration the uncertainties of estimation. In the model it is possible to determine one plus two scenarios: the version developed in the course of forecasting and two more scenarios. These latter models, to put it in a simple way are called “optimist” and “pessimist” scenarios. For the determination of the scenarios - as against the basic forecasting module- a much more simple technique is to be used: in the case of budgetary data presented in OIS format the rate of change should be determined in percentage. Although we speak about optimistic and pessimistic scenarios, any can be different from the basic scenario in any direction.

The scenarios are set in the “**Scenario data**” – “**Scenario setup**” menu. Out of the three columns of figures the central one is the base scenario. That is 100 all over, because the other two scenarios are to be set based on **it**. Left and right to it there are two more columns of figures, they are to be completed in conformity to the expected future.

## RESULTS

### *The Current and Expected Status of the Budget*

The few tables with data shown under “Calculations” help to throw light on certain connections among the budgetary data entered under menu point “Data input.” The model presents the data in three types of forms:

Distribution of revenues and expenditures (percentage form).

Presented values presented at comparable prices (compared to the pre-set base year).

Per capita data (in real value). The two most interesting data (the total of the values calculated at comparable price and per capita) are presented in simplified form.

This structure, which separates operating and investment revenues and expenditures, is useful because it highlights the most important processes in local budget in a short and concise form. In this manual and in the model we refer to it as “Operating and Investment Structure” (OIS).

The structure and management of the tables are identical to those experienced elsewhere. That means that the detailed budgetary table carries the same lines than in the data input part and on Tables 1 and 2 in the Appendix. The simplified (OIS) structured table is also seen in the Appendix. These tables are also divided into smaller tables, and in individual cases paging should be performed among them.

The model can present the forecast results both in details and in a simplified structure. But that is possible only on the basis of the year of real value calculation. No percentage table presenting the changes in the distribution of the budget, or one presenting per capita data are made. Their importance is negligible for the purpose of making forecasts. The budget in simplified structure is available in this case separate from the rest of the tables under another menu point „Scenario data” – „OIS table” – „base case”. That was the easy solution to avoid the need to jump too often among the menu points when comparing the three scenarios.

When designing the model our objective was to make it easy for the user to feed his/her experiences, gained when analyzing the model, into the model and produce better results than the forecast made with the help of mathematical tools. This is important because there is no function, which could fit to the future development of the budgets.

### ***Risk Analysis***

Risk analysis discussed in this chapter and credit calculation, which is the subject of the next chapter make it possible for the local government to assess its creditworthiness, even if could not do so earlier. This can help to reduce the exposure of the local government before drawing concrete credit. The risk analysis module wants to help the local government to decide whether or not it is wise to draw credit in a given budgetary situation.

In the course of risk analysis we took into consideration 19 indicators. We estimated for all of them the value for present year (“**status**”), and in what direction the position of the budget changes (“**trend**”). When calculating the trend we made it possible to make the calculation compared to the previous year or to the average of earlier years. The selection should be made in accordance with the concrete position of the given settlement.

**Table 1**  
**The indicators used for risk analyses and their value for national level**

Scenario: Base case		Countrywide figures	
Indicators		Average of	1998
		1993-1998	
E	Total revenues */total expenditures	101.6	102.6
M	Recurring revenue/recurring expenditures	99.1	103.1
M	Operating sources from the central budget/recurring revenues	76.5	74.9
M	Revenues from assets sale/total revenues**	10.3	7.0
K	Recurring expenditures/total expenditures	80.9	84.4
K	Material expenditures/total expenditures**	18.4	25.4
H	Debt service/recurring revenues	3.6	3.2
H	Amount of debt/total revenues*	6.7	4.3
H	Amount of debt/value of assets	99.1	103.1
D	Change in total revenues */change in total expenditures	1.00	1.07
D	Change in recurring revenues/change in recurring expenditures	1.00	0.98
D	Change in recurring expenditures/change in total expenditures	1.01	1.10
D	Change in value in assets/change in population	1.33	1.05
T	Total expenditures/population, 1,000 HUF per capita	130.68	111.92
T	Local taxes/population**	9.14	10.85
T	Revenues from asset management + institutional revenues/value of assets**	0.09	0.05
T	Value of assets/population, 1,000 HUF per capita	128.27	196.01
S	Number of municipal employees/population (1/1,000)	—	—

The procedure proposed to be followed for risk analysis is as follows:

*Risk analysis inspection:* here the value of indicator numbers can be inspected for the country in general and for the own settlement, and one can inspect the risk rating of the settlement with pre-set values of the indicators.

Model \_ Credit data \_ Risk analysis \_ Jump to risk analysis \_ Done

One can move in the window with arrows.

*Setting the threshold values showing own risk:* This is not a mandatory step! If we want to deviate from the pre-set threshold value we can do it either on the open side or we have to first select from the menu the status then set the threshold values of the trend.

Model \_ Credit data \_ Risk analysis \_ setup of status analysis

Model \_ Credit data \_ Risk analysis \_ setup of trend analysis

In the case of status analysis we have to set a lower and upper threshold value for every indicator number. In the case of trend analysis we have to set the base for the calculation and the tolerance in percentage. This is the same for every indicator.

*Scenario selection:* We must determine on the basis of the data of which scenario risk analysis should be made.

Model \_ Credit data \_ Risk analysis \_ select scenario

*Inspection of risk analysis:* having completed the steps above we have to return to the tables on result.

If the indicator value of a specified indicator status remains below the lower threshold level, according to such indicator the settlement is to be considered “weak”, if it is between the two threshold values it will be considered “medium”, if it surpasses the upper threshold value it is “strong”. The same logic operates for trend indicators, but the qualifications are “deteriorating”, “stable”, and “improving”. For the individual indicators the risks are determined as stated on the following table:

STATUS	TREND	RISK
Weak	Deteriorating	Very high
Weak	Stable	High
Weak	Improving	Significant
Medium	Deteriorating	Significant
Medium	Stable	Acceptable
Medium	Improving	Acceptable
Strong	Deteriorating	Acceptable
Strong	Stable	Low
Strong	Improving	None

For the determination of the general risk of the settlement “very high” represents 0 points, “high” 1 point, “significant” 2 points, “acceptable” 3 points, “low” 4 points and “no risk” 5 points. Accordingly:

Number of points	General risk	Proposal to draw credit
< 10	Very high	Better not to
11-30	High	To draw the minimum possible
31-50	Significant	Better draw less
51-70	Acceptable	Prudent volume of credit recommended
71-90	Low	To draw as much credit as possible
91 <	None	Credit is recommended

Thus the model calculates the credit risk by using 38 indicators with the same weight. It can however also calculate the volume of credit to be drawn with the expected position of the budget.

## Calculation of Credit

Thus the model calculates the sum of credit the local government can draw on the basis of the expected position of the credit and the idle resources of the budget. It is recommended to use the results of credit calculation and those of risk analysis jointly when the local government decides on its own credit policy.

When selection the **Credit calculation** menu point of **Credit data** we get to the dialogue window containing the settings of the calculation of the drawing of credit. Here we can select the method of interest payment and the starting interest rate.

If the credit is of fixed interest rates the program calculates with the specified interest rate for the entire term. If the credit is advanced with discount interest rate the interest rate will change in proportion to the basic rate charged by the central bank- as estimated with the estimated inflation; if the credit is charged market rate, the interest rate on the credit shall be calculated from the fixed portion of interest margin and the portion proportionate to the basic interest rate, estimated on the basis of the basic rate charged by the central bank and the interest on the credit.

The annuity of amortization can also be set, or whether the installations will mean equal portions of the principal. If moratorium is set the program will only calculate with interest payment for the moratorium period. The number of installments to be repaid during the year will also affect the credit calculation. These conditions make it possible for the credit set for credit calculation should consider most of the types of credit available on the market. As however one does not know the future interest rates of credits with variable rates, the results thus obtained are only estimates and will not necessarily coincide even with the pre-calculations the banks may make. The objective of this calculation to make it possible to determine the volume of credit which can be drawn considering the forecast status of the budget and thus avoid possible later budgetary difficulties. The option to select from among the scenarios also serves the purpose that it should be possible to estimate in advance the capacity of the local government to draw credit considering the expected future of the budget.

By pressing the “?” key, the program calculates the maximum sum which can be drawn with the given construction and scenario. As the model calculates 10 years in advance, when calculating the credit it also only considers 10 years. If the local government wants to draw a smaller sum it should state in the cell “credit sum applied for” the proper value. We can print the result with “**Print**” button and key “->” makes it possible to inspect the repayment schedule. Within the repayment schedule we can page with the help of the arrows.

Line “residue resource” shows how much is left during the given year for

development/ repayment in addition to the repayment of the credit. The residue must be 0 minimum once, and from the given construction that year will be considered as the bottleneck.

The model is also suited for the composition of credit portfolio as one can separately enter the sum of credit applied for and use also the line residue resource. Before doing the credit calculation one should check whether those items are stated among development resources which would actually be used, and also on the revenue side one should check all items which are important in the given case. Even if no contract has as yet been signed in relation to them and could thus not be entered into the budget, although there is a good chance for the local government to obtain them, and resources without which the investment for which we want to draw the credit could not be implemented.

### ***Presentation of the Results***

Although when designing the model little emphasis was made on the graphic presentation of the results, we have built in four figures to help to understand the results and help further considerations. The four graphs: Operation result, Source deficit/surplus, Funds available for investment or credit repayment and value of municipal assets. These figures can be obtained on the path: "model" \_ "credit data" \_ "graphs" menu points, and then selecting the proper figure, inspected.

## **SWITCHING THE PROGRAM ON AND OFF**

The sub-menu ***Administration*** was/is of importance primarily in the development phase of the program.

***Enable design.*** It is with this menu point that the pages of the Excel file can be edited, the hidden pages disclosed. You need to know the password to use this menu point.

***Disable design.*** The program can be protected with the use of this menu point, to prevent accidental modifications.

***Restart program.*** This menu point will be used very rarely. With the help of this menu point we simulate the situation when the file is closed, then reopened. Thus we run again the initializing program component. This may be needed if we save the file under a new name, because in such a case the program would not recognize the name of the new workbook.

***Rebuild screen.*** At the start the program hides parts of the screen, which are not necessarily needed to run the program. But if we also want to study the contents of the tables, it would be useful to present these elements. With the use of the





menu points we can make them seen and with the help of menu point ***Restart program*** we can again hide them.

## **APPENDIX**

**Table 1**  
**Revenues table**

	Thousand HUF	1993	1994	1995	1996	1997	1998
1. Centrally regulated operation resources							
1.1 Personal income tax							
1.2 Personal income tax supplement							
1.3 Normative subsidies							
1.3.1 Education sector							
1.3.2 Cultural sector							
1.3.3 Sports							
1.3.4 Health care sector							
1.3.5 Social sector							
1.3.6 Others (e.g., operated by the settlement.)							
1.4 Centralized appropriations							
1.5 Social Security transfers							
1.6 Central subsidy taken over for operations							
2. Own current operation revenues							
2.1 Revenues taken over from sales revenue of institutions							
2.2 Levies							
2.3 Other funds taken over by the local government.							
2.4 Total local taxes							
2.4.1 Industrial tax							
2.4.2 Tax on plots							
2.4.3 Tax on structures							
2.4.4 Communal tax							
2.4.5 Tourist tax							
2.5 Vehicle tax							
2.6 Financial assets taken over for operation.							
3. Accumulation and capital type revenues.							
3.1 Central development funds							
3.1.1 Targeted and labeled subsidies							
3.1.2 Development Councils							
3.1.3 Other central funds							
3.1.4 Other central development subsidies taken over							
3.2 Local development revenues							
3.2.1 Revenues from the sale of assets.							
3.2.1.a. Sale of valuables.							
3.2.1.b. Sale of bonds							
3.2.2 Revenue from the use of assets							
3.2.2.a. Revenue of housing property							
3.2.2.b. Revenues from non-housing property.							
3.2.2.c. Interest revenue							
3.2.2.d. Recovery of investments							
3.2.2.e. Revenue from other types of utilization							
3.2.3 Financial assets obtained from the citizens for							
3.4 VAT refund (after AT.)							
3.5 Other financial assets taken over (e.g., from other local							
3.5.1 For operation							
3.5.2 For development							
4. Credits							
4.1 For operation							
4.2 For development							
5. Financial residue from previous year							
6. Balancing, pending, carry over items							
Total revenues							

**Table 1**  
**Expenditures table**

	<b>In thousand HUF</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
1. Operation expenditures							
1.1 Administration							
1.2 Health care							
1.3 Education							
1.4 Social sector							
1.5 Infrastructure							
1.6 Other operation expenditures							
2. Financial subsidy to citizens							
3. Subsidy to enterprises							
4. Investment and development expenditures							
4.1 Administration							
4.2 Health care							
4.3 Education							
4.4 Social sector							
4.5 Infrastructure							
4.6 Other development expenditures							
5. Debt service							
5.1 Interest payments							
5.2 Repayment of principal							
5.2.1 For operation							
5.2.2 For development							
6. Reserves							
7. Balancing, pending, carry over expenditures							
8. Residue money							
9. Closing stock of financial assets							
Total expenditures							
From operation expenditures:							
Personnel benefits							
Taxes on personnel benefits							
Overhead expenditures							
Other operation expenditures							

**Table 1**  
**OIS table**

	<b>Million HUF</b>	<b>1993</b>	<b>1994</b>	<b>1997</b>	<b>1998</b>	<b>1997</b>	<b>1998</b>
Own current revenue							
Centrally regulated current revenue							
Total current revenue							
Total current expenditure							
Operation result							
Debt service							
Net operation result							
Own capital revenue							
Capital revenues transferred from public finance							
Total capital revenue							
Accumulation and capital type expenditures							
Investment deficit (+) / surplus (-)							
Other resources							
Other expenditures							
Deficit of resources(+)/ surplus (-)							
Credit drawn							
Balance of previous year							
Closing balance							